## **7 GENERATIONS**

## TAKING OWNERSHIP OF ENVIRONMENTAL HEALTH

"Our leaders were instructed to be men of vision and to make every decision on behalf of the seventh generation to come; to have compassion and love for those generations yet unborn."

-Chief Oren Lyons

he following story is about acquiring new technical knowledge and skills to solve new types of problems. The story also focuses on respecting and strengthening traditional ways and values as new knowledge is blended into village life to make healthier communities. The storyteller is Bill Stokes, Environmental Specialist with the Alaska Department of Environmental Conservation (ADEC).

### Sitka and Southeast, 1972–1993

"I worked for the Alaska Lumber and Pulp (ALP) mill in Sitka for 21 years before it closed in 1993. I had worked my way up to the Environmental Department's 'Lead Operator,' responsible for all of the water and wastewater treatment systems at the Sitka Pulp Mill. I was also the lead hazardous materials (HAZMAT) responder for the Pulp Mill, six logging camps and a sawmill in Wrangell. By the time I left the Sitka Pulp Mill, I was qualified to run every type of water and wastewater system in the U.S. I also understood hazardous materials and oil spill response because I was the lead HAZMAT responder who would clean them up for the Sitka Pulp Mill, their sawmill and their logging camps.

"When the mill closed, I planned to go back to school for an environmental engineering degree. Then the Alaska Department of Environmental Conservation offered me the Bethel Field Office Manager position and I just couldn't pass up the chance to play with 58 village water systems."

## Bethel and Southwest, 1993-1994

"When I arrived in Bethel it was clear that the villages of the YK Delta sorely needed all these practical skills. The Bethel Office Manager's responsibility was primarily to enforce regulations. Technical assistance was a distant second. I reversed those priorities and made technical assistance the focus. The villages needed practical technical assistance knowledge and skills.

"I soon realized that village tribal authority was also an essential part of solving environmental problems. Both the state and federal governments historically had used a very heavy regulatory hand with these villages. 'You *will* do it by the book. Here are the regulations.' The village's authority and desires had not been included in either defining the problem or in formulating the solution. If you were from ADEC, the villagers' expectation was that you were there to yell at people, issue threatening letters and punitive actions. I didn't find this tactic at all useful because it just didn't make things better or really solve the village's problems.

"Historically, the ADEC provided very little technical assistance to the villages and had lacked a basic understanding of how to teach and transfer the necessary technical knowledge in the context of the culture. Learning traditional teaching methods was a very important missing piece in the picture I saw of how the ADEC operated in the villages of the YK Delta.

"While living in Sitka, I also commercially fished and I got to know the villages throughout Southeast. At the Sitka Pulp Mill, many of the mill workers were Southeast Natives. Through these Southeast Natives I learned the importance of cultural processes: showing respect for elders, knowing how and when to talk, asking permission, and understanding that the tribal government is a valid and real government with an important role to play. The more I learned, the more I was amazed at how the Native people, and their tribal governments, were the objects of scorn and prejudice."

-Bill Stokes

"So in visiting the YK Delta villages, I went in to watch, to listen and to learn. I learned their traditional system for teaching and learning, and I worked hard to find out how I could best be of service to the village. I never just barged in. I always asked permission to visit first. It was a conscious choice to be different. Then and now, when I visit a village, I wear a bright orange baseball hat so everybody knows who I am and I can't be confused with anybody else.

"It is my experience that Alaska Natives have a tremendous respect for practical knowledge that will make a difference in their lives, especially in the lives of their children and elders. When the villages understood that I was a skilled water plant operator, I was really in demand and I made myself available. Every time I go to a village, I make it a point to talk to the water operators to see if they need help or training. Many times I've been up at 2 o'clock in the morning assisting the village water plant operator to get the water plant working properly.

"As I did water plant operator training in the villages, I would explain my view of the technical assistance world from my eyes and ask: 'If you want to properly operate your water treatment plant, it is your choice. You live here. If it is not important to you, you won't do it and I am going to leave. But if it is important to you, I will stay and help you in any way that I can.'

"This is a very different mind set from 'the regulatory process.' When the water plant operators and the village residents understand the importance of safe water for the whole village, then regulatory compliance happens as a matter of course. The village gains a greater appreciation of the role of the operator and chooses to make the drinking water safe where they live. In this process they come into compliance with the regulations, but compliance is not the objective of what they are doing. They are working to make their village safe and improve their quality of life."

# Developing the Village Environmental Assessment, Anchorage, 1994–1997

"It was during this time that I worked with traditional Yup'ik villages that I began to understand the importance of ownership to making things work in the villages. In late1994, I moved to the ADEC Anchorage Office to apply my approach statewide as part of a new ADEC Program called Rural Issues. Simon Mawson and I now had 218 villages to work with. We decided that we would be the most useful if we made our main charge to provide environmental education and technical assistance to the villages.

"Between 1995 and 1997 we developed a 'Village Environmental Assessment' process that was based on the concept that villages could, and would, address their own environmental issues if they developed 'ownership' of both the problems and solutions. At their invitation, I would go to a village, detail all of the environmental issues that I found and, where possible, suggest practical village based solutions that the villagers themselves could implement.

"From the very beginning, I designed the Village Environmental Assessment for the Village Councils and not for the regulatory agencies. I never ranked the environmental issues because that was the Village Council's responsibility. I would present the environmental issues that I found to the Village Council and say, 'This is what I see as environmental issues in your village and some possible village based solutions. You decide what you want to address and I will help you in whatever way I can.' I never quoted a state regulation or said, 'You have to do this.' What I said was, 'You live here. Choose what is important to you.'

"The concept was an immediate success for the villages, and the more I used it, the more I learned about how to help the villages achieve what they wanted.

### Kids

"The two most useful resources for getting anything accomplished in a village are the elders and the children. If you can get either of these groups on your side, the job is as good as done. I try to go to a village a day before my scheduled meeting and visit with the school kids first. I explain why I am there and what I am trying to help the village with.

"By the time I meet with the council that evening or the next day, the whole village would know why I was there and what the issue was. It would now be a village wide issue. I didn't have to try to convince the Village Council there was an issue that they might want to address. Instead, it would be the mothers and elders who were getting a hold of their brothers, sons and nephews in the Village Council and saying 'fix this problem now.'"

"School kids are so important. I teach from kindergarten to high school to whichever class will invite me in to explain my visit. I think that kids from the 4<sup>th</sup> to the 8<sup>th</sup> grade are the most effective for getting the word out. Fourth graders really get it! When you have 200 kids going home and asking about the water or when you have 50 kids asking the water plant operator what the chlorine residual is, the village has ownership!"

## Oil Spill Clean-up

"Sometimes you don't have the luxury to plan a visit. You are reacting to a crisis, but the principle is the same.

"One village called me because they had a large oil spill. A snow-go accidentally cut the oil line to the washeteria and spilled about 2,000 gallons of diesel on the ground. I went out immediately. The villagers showed the spill site to me and asked what I was going to do. I asked them, 'What are you, as a village, going to do? This is an oil spill right in the middle of your town. If you don't clean it up, it is eventually going to get all over the village. You are going to smell diesel fuel all summer long, maybe for years. There is also the potential for fire. Are you sure this is something you want to let happen? I can show you how to clean it up, but it is your decision.'

"I was in a village and the drinking water was truly terrible. So I gave the school science class a chlorine test kit and they tested the chlorine residual **every day**. Don't you think the operator wasn't on his toes! When they found unsafe water, the whole village knew about it."

"I explained that they had two choices on how to clean up an oil spill. They could call in a properly certified HAZMAT team to clean it up. That's expensive. On the other hand, the owners of the facility could clean it up. Since the village corporation owned the tank farm and the village people were members of the corporation, they legally could clean up the oil spill themselves. I gave the interested villagers four hours of oil spill response training and these villagers were out there past 2 AM every night cleaning up the spill and collecting the oil. In four days it was gone. A major oil spill was reduced to nothing.

"This village had had oil spills before. HAZMAT crews had come in to the village to clean it up. They would just put the fuel it into containers and haul it away. All the associated costs of the cleanup would be charged to the village. The village didn't know that they could clean it up themselves. No one had shown them how, and they didn't know that they could actually keep the fuel oil. It was the fastest and easiest way to clean up their fuel oil spill. At a value of almost \$200 a drum for #1 diesel, you had villagers lined up to recover the fuel oil. Ownership!

"I went back two years later in response to another oil spill, but it was cleaned up before I got there. The village knew how to clean it up. It was their problem. They fixed it. Ownership!"

#### 7 Generations

"By 1997 I had conducted more than 20 Village Environmental Assessments statewide and the requests from the villages to do them far outstripped my ability to actually do them. There just had to be a better way. After wrestling with several alternatives, it became very apparent that I needed to develop an environmental toolbox that allowed the villages to conduct their own environmental assessments and take ownership of both the problems and solutions processes. Over the course of several months I took all the concepts and lessons that I had learned and developed them into a rough draft of what later became 7 *Generations: Addressing Village Environmental Issues for the Future Generations of Rural Alaska* (Suanne Unger et al, March 1999).

"The 7 Generations concepts were the next logical step in promoting environmental ownership by the villages. The manual helps the villagers identify and address their own environmental issues. It is a resource book that teaches the village how to put together a planning team, how to do its own environmental planning survey to identify community priorities and how to do a comprehensive technical survey to help identify problem issues that may need outside assistance or advice. The Native Consortium, Chugachmiut, hired a professional schoolteacher named Sue Unger to help me with this process. Sue's keen insight and ability to articulate the 7 Generations ideas were absolutely essential in making the manual a reality.

"In September 1997, the first 7 Generations environmental workshop was held in the Village of Aniak. Twenty-two village environmental coordinators from around the state attended. The workshop lasted four days and many village environmental problems and possible solutions

"As part of a 7 Generations class conducted in the village of Emmonak, I also gave an 8 hour refresher class on how to prevent, contain and clean up oil spills. Not even a month later they had a large oil spill only 200 feet from the Yukon River and it was right during break up. They quickly built an ice berm around the spill and it never got within 150 feet of the river. They trapped and cleaned the fuel oil spill up before the ADEC got there."

were discussed. A workshop participant from Mountain Village realized that the village dump had many lead batteries and was right above the river, their source for winter pike fishing. The improper disposal of old lead acid batteries is a serious threat of lead poisoning to both humans and the environment. After the workshop, the Mountain Village residents collected and shipped out 15,000 pounds of batteries at a cost of \$.32 a pound at their own expense. The village has an ongoing lead acid battery recycling station to insure that lead stays out of their environment.

"As the word of the new 7 Generations course spread, requests from the villages increased a lot. The demand for the 7 Generations course pointed to a serious limitation: there were more requests for the course than I was able to provide. The message of the 7 Generations course fortunately pointed to the solution: train the people in the villages to teach the course. Ownership!

"I have taught over 250 people from more than 110 villages. The majority have taken the 'Train the Trainer' course. The desire to learn and spread knowledge is one of the really neat things about working with villages. There are probably over 100 people using the 7 Generations concepts and tools in their villages who have learned it from someone who graduated from the 'Train the Trainer' course.

"I do environmental education and technical assistance over the phone now. A village will have identified two or three issues they want to address as a result of doing their Village Environmental Planning Survey. Then they will call me to discuss how they go about addressing the problem. We strategize on issues like getting the whole community involved in the project because the community has to own the solution as well as the problem."

## WHAT NUMBERS CAN TELL US

# Do we always have to demonstrate need by measuring the problem directly?

It is sometimes hard to prove a direct connection between an environmental problem and the number of people who might get sick or be affected by it. Sometimes this may be because it takes a long time for the effects of a pollutant to show as numbers of ill people in your community. Sometimes it is because people move away. Sometimes a pollutant can be just one of many things that contribute to an illness. These problems are especially true in small communities where the numbers of people affected may be very small.

We know from many types of studies that lead is a toxic metal. Once it gets into the environment or your body it doesn't go away by itself. It stays around for thousands of years. So the importance of removing lead from your community doesn't have to be demonstrated by the number of deaths or cancer patients. You make the decision to get rid of it for that "seventh generation."

"When I went to Bethel in 1993 there was almost no lead acid battery recycling. At a recent statewide environmental conference I took a straw poll from the village attendees and I believe that more than 900 tons of lead acid batteries have come out of the villages for recycling."

- Bill Stokes

"ADEC, as an agency, doesn't fix the problems; the villages themselves fix them. If a village chooses to share their environmental information with us, wonderful! Actually all we need to do is ask. But in providing technical assistance I do get to see most of the numbers in the surveys done by the villages. After discussing it with the village, I either send the information back to the village or destroy it. It is not my information to share."

- Bill Stokes

#### Whose numbers are these anyway?

Numbers can be very useful to different types of people. When Bill Stokes designed the 7 Generations Village Environmental Planning Survey (VEPS), he intentionally did not design it as a reporting system to the State of Alaska. Rather, he built it as a reporting system for the village councils. The most important numbers to make a difference in actually correcting the problem were the numbers that the village needed. This data, the process of getting it, and putting the numbers to use were ownership issues. For the numbers to be used, they had to be part of the village's environmental planning survey.

# Do you need numbers to tell the whole story about how successful you have been in solving a problem?

Numbers are probably not completely necessary in telling a story but they can be very helpful, even in dressing up a simple anecdote as in this Landfill Snow Birds example of Bill Stokes's experience in Galena:

"At a 7 Generations workshop in Galena in 1998, the attendees wanted to get rid of 'Landfill Snow Birds,' those white plastic shopping bags that flutter at the dump and in the village. I showed the class some canvas shopping bags I use at home. The Louden Tribal Council bought and distributed 6 canvas bags to each house in the village. Since the school children decorated the bags, ownership and use was immediate. Plastic shopping bags were banned from the village stores. The 2002 Galena spring cleanup netted only 2 "landfill snow birds" in the entire village. More than 40 villages have now banned the bag. Extinction is near."



# Aren't numbers and data hard to get because management information systems are very expensive to develop and maintain?

Systems for collecting data are often very expensive to design and even more expensive to maintain and collect data for. But you do not always need to develop your own management information system to have a good source of very useful numbers.

**Yutana Barge Lines** Hazardous Materials Hauling 1999-2001

	Used Oil	Batteries
1999	385 gal	9,100 lbs
2000	9,130 gal	45,960 lbs
2001	3,795 gal	15,240 lbs

Yutana Barge Lines serves villages along the Yukon River. In the past it delivered goods to the villages, but returned to its base in Nenana empty. In 1998 as part of a compliance settlement with ADEC, Yutana agreed to haul hazardous materials from 10 villages along the Yukon for two years instead of paying a fine. Villages had been accumulating hazardous materials like old lead acid batteries, as well as recyclable materials like aluminum cans and used motor oil.

The owner of Yutana was born in the village of St. Mary's, so he was aware of the importance of the service the backhauling was providing. He decided to continue the service free of charge and the service has expanded to twenty villages. All of these villages were familiar with the importance of recycling from 7 Generations.

In the process of hauling hazardous materials out of these villages, Yutana has developed numbers for us to better understand the quantity of hazardous materials in the villages in general. We now know that since 1999 over 70,000 pounds of lead acid batteries and 13,000 gallons of used motor oil have been removed from these few villages.

When looking for numbers to better understand or describe a problem, do some detective work to find organizations or businesses that might have numbers that are helpful.

### THINGS TO CONSIDER

When dealing with new problems and new knowledge in your village or neighborhood, you might want to keep in mind ...

- It is your responsibility to protect not only your culture but also your livelihood and the place you live in. You choose. You make decisions. If you don't like it, don't accept it.
- Traditional values are guides to deciding on how to deal with any problem. Traditional techniques should always be carefully considered and evaluated.
- New knowledge and new skills may be necessary to make your community the kind of place you want it to be. Cultures and communities are always changing and subject to outside influences. You have to explore change and decide what the best solution is for you.
- Change is always occurring and you must take ownership of the future in the present. Determine how to make change work better for you and your community.

Almost all of today's environmental issues relate to new materials, new lifestyles and increased population. Communities need to draw both on traditional knowledge and on new information and techniques to deal with new problems. Knowledge increases the ability to control circumstances rather than to be controlled by them.

With the implementation of the Millennium Agreement, Alaska Native village tribal governments have a new and more clearly designed official relationship with the State of Alaska. The State recognizes that Alaska Native villages are sovereign governments, and has entered into government-to-government relationships with federally recognized tribes. This new relationship should improve our ability to solve problems and build healthier communities.

"I always ask my classes to look out the window and to tell me what they see out there that they don't like. Then I ask them to please tell me how they are going to fix it because if they don't fix it, it is going to be there for their grandchildren."

- Bill Stokes

"If you are fortunate enough to spend time with Alaska Native people, remember you are dealing with cultures and traditions that have evolved for at least 12,000 years."

-Alaska Native Health Board

### Millennium Agreement Guiding Principles

- a) The Tribes have the right to self-governance and self-determination. The Tribes have the right to determine their own political structures and to select their Tribal representatives in accordance with their respective Tribal constitutions, customs, traditions, and laws.
- (b) The government-togovernment relationships between the State of Alaska and the Tribes shall be predicated on equal dignity, mutual respect, and free and informed consent.
- (c) As a matter of courtesy between governments, the State of Alaska and the Tribes agree to inform one another, at the earliest opportunity, of matters or proposed actions that may significantly affect the other.
- (d) The parties have the right to determine their own relationships in a spirit of peaceful coexistence, mutual respect, and understanding.
- (e) In the exercise of their respective political authority, the parties will respect fundamental human rights and freedoms.

www.gov.state.ak.us/STRT/agree.pdf

#### When you are visiting a village on State business ...

The following are some practical rules based on guidelines that ADEC has developed to promote better collaborative relationships with villages, especially in the context of the Millennium Agreement. Keep in mind that most of the suggestions apply to any audience, and any community or neighborhood, but these lessons have been learned in the context of work with Alaska Native villages, where some of the expectations are especially important:

- Always have a key contact in the village you are visiting. If you don't already have a contact, you may identify the tribal government key contact for a community by accessing www.gov.state.ak.us/strt/
   Tribes.html on the Governor's web page.
- Ask your key contact and/or whomever you are going to be working with for permission to come into the village. Ask each time. This allows you to be a guest.
- Show respect for the elders. Make sure to visit with at least one or two elders.
- Always explain why your visit is important. Never use "regulations" as the reason.
- Whenever possible, give presentations as a story.
- Never promise something you cannot deliver. It is okay to say you will try to do something, but don't promise unless you are absolutely sure you can and will do it.
- Slow down your speaking pace. Be respectful in tone. You may be talking with people for whom English is a second language. Speaking slowly also gives people a chance to think. This is especially important for a new and different subject.
- Pause occasionally—more often than you may be used to. Let people respond at their own pace.
- Listen carefully. Don't focus your attention on your next response to a statement. Talk and listen with your heart as well as your head.
- Give presentations in school. Be a conduit for other information or contacts
- Become a resource to the community.
- Get the community involved as a constructive partner in solving their problem.
- Prior to the village visit, contact the school principal and/or science teacher. Offer to do a presentation about why you are in their village. Children will take messages home to parents. Elders will know about you. Give children ownership by teaching the skills that they will use as future leaders of the community.
- Bring food—a box of fresh fruit for the Head Start program or the elders.
- Walk around the village. Make an effort to stay a couple of days. Get to know the people informally. Let them know that you are interested in them and their community.

# When Doing Research with Native Communities and Tribal Organizations ...

Another longstanding grievance of Alaska Natives relates to "invading" government agencies and academic institutions doing research in Native communities, not sharing the credit for or results of research conducted and not sharing the benefits of research findings. The Alaska Native Health Board, in collaboration with the American Indian Law Center in Albuquerque, New Mexico, has produced *Guidelines for Partnering for Native and Tribal Organizations on Research Studies*. This guide promotes a respectful "winwin" approach by providing "advice and guidance for communicating with, obtaining consent from and including communities as partners in research projects. It is designed to benefit the institution, the researcher and Alaska Natives and to develop and maintain a cooperative working relationship among all involved. It is written to include community Native involvement in all phases of a project including developing, planning, implementing, analyzing and interpreting results.

### To FIND OUT MORE

Department of Environmental Conservation Environmental Assistance Center 1 (800) 510-ADEC (in Alaska) (907) 269-7586 (outside Alaska) CompAsst@envircon.state.ak.us www.state.ak.us/dec/dsps/compasst/cap.htm

Alaska Native Health Board Partnership Guidelines & Other Publications www.anhb.org/sub/epi/publications.html

"Communicating Across Cultures" Video Tape Presentations by Father Michael Oleksa Publisher: KTOO Television, Juneau: info@ktoo.org Alaska State Library, Circulating Collection HM258.C65 1994 Vol.

Office of the Governor State Tribal Relations Team P.O. Box 110001 Juneau, AK 99811-0001 (907) 465-3500 www.gov.state.ak.us/strt/

# REFERENCE CHAPTERS IN HEALTHY ALASKANS 2010, VOLUME I

Chapter 6. Educational and Community-Based Programs

Chapter 11. Environmental Health

Chapter 12. Food Safety

Chapter 26. Public Health Infrastructure

#### Customs and Courtesies in Alaska

Traditions and customs vary dramatically but there are a few general rules that are universal.

Respect for elders: Elders are ... the guardians of tradition and culture.
If you are lucky, some will participate in your project.

Communication: It is a serious breach of manners to interrupt anyone who is talking. Community meetings are forums for all to speak and to say whatever is on their mind.

Time: A scheduled one or two hour meeting is also a breach of local custom. At a minimum plan on several days in the community with several open ended meetings.

-Excerpt, ANHB Guidelines

# Notes